

SLOWLY but surely is our information as to the former extension of the range of the Saiga antelope of the Volga steppes tending towards completeness. The latest addition to the remains of this animal is a skull from the superficial deposits of Kulm, recently added to the museum at Dantzig. This specimen, which has been identified by Dr. A. Nehring, is the second hitherto obtained in Germany. As our readers may remember, an imperfect skull was dug up a few years ago near Twickenham.

To the last number of the *Proceedings* of the Royal Physical Society of Edinburgh Messrs. W. S. Bruce and W. Eagle Clarke communicate a paper on the mammalia and birds of Franz-Josef Land. That such a desolate region would have but few land mammals was only to be expected, and the Polar bear and Arctic fox are the only two actually met with, although there are reports as to the occurrence of a hare, and the reindeer is represented by accumulations of its antlers, which were probably carried to their present position years ago by ice-floes. On the other hand, the birds number at least two-and-twenty species.

MR. F. TURNER reprints, from the *Proceedings* of the Australasian Association for the Advancement of Science, a paper on the supposed poisonous plants of South Australia.

THE most recent numbers received of the *Biologisches Centralblatt* contain a continuation of Dr. Keller's useful epitome of the results of recent researches in vegetable physiology and biology, as well as several original papers in different departments of zoology and botany.

WE learn, from an article in the *Board of Trade Journal* for June, that the source of the india-rubber exported from Peru through Pará has been determined by M. Hubert, a botanist on the scientific staff of the Museum of Pará, to be a species of *Castilloa*, possibly identical with the *Castilloa elastica* of Central America.

THE *Transactions* of the British Mycological Society for 1897-1898 contain several interesting papers on British Mycology, but some of them are (admittedly) reprints, and, with regard to the others, there is no information as to the date or place where they were read, or even any note of the meetings of the Society. No date even is given to the delivery of the "President's Address." The officers of the Society appear to be a President, an "Acting President," and an Honorary Secretary and Treasurer.

WE have received vol. i. No. 3 of the *Comunicaciones del Museo Nacional de Buenos Aires*. It contains a paper on the Coleoptera of Tierra del Fuego, and some short articles on botany, geology and nomenclature.

AN important paper, by Dr. Philip P. Calvert, on Odonata from Tepic, Mexico, with supplementary notes on those of Baja, California, has appeared in the *Proceedings* of the California Academy of Sciences (third series, Zoology, vol. i. No. 12). Detailed descriptions are given of many of the species.

THE thirteenth volume (new series) of the *Geographical Journal*, containing the six numbers of the *Journal* issued this year, has just been published. The papers printed in the volume; the record of geographical events and investigations; and the monthly bibliography of current geographical literature, make the volume, like previous ones, essential to the library of the student of geography.

THE second part of the first volume of the *Annals* of the South African Museum has reached us. Among the papers included in it are: a descriptive list of the rodents of South Africa, by Mr. W. L. Sclater; a further contribution to the

South African Coleopterous fauna, by Mr. L. Péringuey; the South African species of Peripatidae in the collection of the South African Museum, by Dr. W. F. Purcell; and a description of a new genus of Perciform fishes from the Cape of Good Hope, by Mr. G. A. Boulenger, F.R.S.

A THIRD edition, considerably enlarged, of "Metal-Plate Work," by Mr. C. T. Millis, has been published by Messrs. E. and F. N. Spon, Ltd. The volume shows how nearly all the patterns required by sheet-metal-workers can be set out on general geometrical principles. The book has proved of great value to pattern-makers since it was first published twelve years ago, and as the system of construction set forth in it is now regarded as the best means of making the practical man familiar with the geometrical principles underlying his work, the volume should be even more widely used in the future than it has been in the past.

THE additions to the Zoological Society's Gardens during the past week include a Common Paradoxure (*Paradoxurus niger*) from Java, presented by Mr. J. Osborne; a Barbary Mouse (*Mus barbarus*) from Barbary, presented by Miss Lyell; a Cormorant (*Phalacrocorax carbo*) from Scotland, presented by Mr. Percy Leigh Pemberton; two Carrion Crows (*Corvus corone*), British, presented by Lieut.-Colonel Vilett Rolleston; a Rock Thrush (*Monticola saxatilis*), European, a Yellow Hangnest (*Cassicus persicus*) from South America, presented by Mr. H. J. Fulljames; twelve African Walking Fish (*Periophthalmus koelreuteri*) from West Africa, presented by Dr. H. O. Forbes; a Brown Mouse Lemur (*Chirogaleus milii*), two Elegant Galidias (*Galidia elegans*) from Madagascar, a Red-bellied Tamarin (*Midas labiatus*) from the Upper Amazons, two Mexican Conures (*Conurus holochlorus*) from Mexico, a Tabuan Parrakeet (*Pyrrhulopsis tabuensis*) from the Fiji Islands, deposited; a Wapiti Deer (*Cervus canadensis*, ♂), a Great Eagle Owl (*Bubo maximus*), bred in the Gardens.

OUR ASTRONOMICAL COLUMN.

COMET 1899 *a* (SWIFT).—This comet, after passing perihelion, showed such a definite increase of brightness and other evidence of internal action, that its progress was closely watched at several observatories (*Astronomical Journal*, No. 464, vol. xx. pp. 60-61). Prof. E. E. Barnard, observing it on May 20 and several succeeding occasions, with the 40-inch refractor of the Yerkes Observatory, found the head of the comet to be distinctly double, the smaller component being south preceding with reference to the main body. From successive measures it was found that the position angle was gradually decreasing, while the distance between the two nuclei was increasing from 28".84 on the 20th to 38".16 on the 23rd. Though no tail was visible to the eye, a photograph obtained on May 18 showed a slender tail 6° or 8° long.

Prof. C. D. Perrine also secured several observations with the 36-inch Lick refractor, confirming the duplex character of the head of the comet. The two nuclei were estimated to be of the 8.0 and 9.5 magnitude respectively, and neither appeared stellar with power of 270.

The following continued ephemeris is given by Dr. A. Stichtenoth in *Astr. Nach.* (Bd. 149, No. 3574):—

Ephemeris for 12h. Berlin Mean Time.									
1899.	R.A.			Decl.			Br.		
	h.	m.	s.	h.	m.	s.			
July 6 ...	14	16	54	...	+17	16.5	...	0.11	
8 ...	...	15	29	...	16	12.6	...	...
10 ...	...	14	20	...	15	13.0	...	0.08	
12 ...	...	13	26	...	14	17.3	...	...
14 ...	...	12	43	...	13	24.9	...	0.06	
16 ...	...	12	12	...	12	35.6	...	...
18 ...	...	11	52	...	11	49.2	...	0.05	
20 ...	14	11	40	...	+11	5.2	...	...

TEMPEL'S COMET 1899 c (1873 II.).

Ephemeris for 12h. Paris Mean Time.

1899.		R.A.		Decl.		Br.
	h. m. s.			° ' "		
July 6	... 20 22 29.7	...	...	11 13 0	...	3.008
7	... 23 44.7	...	...	11 38 27	...	
8	... 24 59.3	...	...	12 4 37	...	
9	... 26 13.6	...	...	12 31 29	...	
10	... 27 27.5	...	...	12 59 1	...	
11	... 28 41.2	...	...	13 27 12	...	3.229
12	... 29 54.5	...	...	13 55 59	...	
13	... 20 31 7.6	...	...	14 25 22	...	

HOLMES' COMET (1892 III.).—

Ephemeris for 12h. Greenwich Mean Time.

1899.		R.A.		Decl.		Br.
	h. m. s.			° ' "		
July 7	... 1 57 53.4	...	...	+25 17 1	...	
9	... 2 0 56.9	...	...	25 51 37	...	0.0386
11	... 3 58.5	...	...	26 26 4	...	
13	... 6 58.2	...	...	27 0 21	...	
15	... 9 55.9	...	...	27 34 28	...	0.0398
17	... 12 51.4	...	...	28 8 26	...	
19	... 15 44.6	...	...	28 42 14	...	
21	... 2 18 35.5	...	...	+29 15 53	...	0.0412

MAXIMA OF MIRA.—Mr. A. A. Nijland, of Utrecht, communicates to *Astr. Nach.* (Bd. 149, No. 3576) an account of his observations of Mira during the apparition in 1898. During the period extending from August 9, 1898, to March 5, 1899, sixty-one observations of magnitude were obtained. The light curve being plotted from these gives the time of maximum as October 4, 1898, this being very close to the predicted time given by Chandler in his third catalogue. The following table shows the observed and calculated times of the last three maxima:—

Observed maximum.	Calculated Chandler III.	Retardation. Days.	Magnitude.	Period. Days.
1897 Jan. 11	1896 Dec. 13	29	3.70	319
1897 Nov. 26	1897 Nov. 9	17	3.24	312
1898 Oct. 4	1898 Oct. 6	-2	2.91	

THE NEW ALGOL VARIABLE IN CYGNUS.—Harvard College Observatory *Circular* (No. 44) contains the results of a detailed examination of all the Draper memorial plates covering the region of the variable star BD + 45°3062, discovered by Mme. Ceraski at Moscow (see *NATURE*, vol. lx. p. 114). Altogether 195 plates show the star, on 170 of which it is at its full brightness, while 20 show it below its normal magnitude. A full discussion of these plates resulted in the determination of the period of the variable to be

4d. 13h. 45m. 2s.

It is noticeable that the variation in brightness of this star amounts to about three magnitudes, and therefore exceeds that of any Algol star hitherto discovered. Like all other Algol stars, its spectrum is of the first type. A table showing the times of minima for the remainder of the year is included in the *Circular*.

THE HOUSING OF THE OFFICES OF THE UNIVERSITY OF LONDON.

THE history of the negotiations which have taken place between the Government and the Senate of the University of London, relating to the proposal of the Government to provide accommodation for the University in the Imperial Institute building, is contained in the subjoined extracts from the Report of the Special Committee appointed by the University to confer with representatives of the Treasury and of the Imperial Institute upon the matter.

At a meeting of the Senate held on December 7, 1898, a letter from Sir Francis Mowatt to the Vice-Chancellor (Sir Henry Roscoe) was read, stating that it had been suggested to the Cabinet that an arrangement might be possible by which an adequate and dignified home for the University of London could be provided in the Imperial Institute buildings, subject

to some extension and internal alterations, if terms could be offered which would be acceptable to the authorities of the Institute.

The terms submitted to the Senate of the University are as follows:—

"The Government will provide adequate and suitable accommodation for the University of London, as constituted by the Act of last Session, in the buildings of the Imperial Institute, such accommodation to include examination rooms and laboratories either in the building itself or in a new building to be erected immediately adjoining it.

"The Government will undertake the entire cost of the upkeep and maintenance of the buildings, including their protection from fire.

"The works necessary for providing the accommodation in the Institute buildings, corresponding to that now enjoyed by the University in Burlington Gardens—and including the new laboratories—will be put in hand at once; and the headquarters and offices of the University, as at present constituted, will be transferred from Burlington Gardens as soon as possible after the new accommodation is ready for their reception.

"The accommodation in the Institute buildings required for the teaching side of the University will be prepared in anticipation of the date at which the provisions of the Act of last Session come into full operation.

"A Committee consisting of representatives of the University, the Treasury, and the First Commissioner of Works, should be appointed forthwith to inquire and report as to the necessary alteration and adaptation of the Institute buildings for the purposes of the University."

After a brief statement of the scope and object of this offer, the discussion upon the proposals was adjourned. There seemed to be some uncertainty in the minds of certain of the Fellows as to the precise terms upon which the proposed joint occupation of the buildings of the Imperial Institute were to be arranged as between the Government on the one hand and the University and the Imperial Institute on the other. It was felt that if a statement could be made upon certain points raised in the discussion such statement would be of signal service in clearing away any misapprehension which might have arisen. The following inquiries were therefore sent to Sir Francis Mowatt, and, with the replies, were read at a meeting of the Senate on February 1:—

"1. Is it to be understood that the Government proposes to take over the whole of the present building of the Imperial Institute for the use of (a) the University of London, (b) the authorities of the Imperial Institute?

"2. Will the University (in case the proposals are carried out) be the tenants of the Government under identical conditions as to fixity of tenure, maintenance, &c., as heretofore in Burlington Gardens?

"3. Is it understood:

"(a) That the University will become possessed for its sole use of so much of the Institute buildings as the Government shall decide, after communication with the University of London, to be sufficient for its present and prospective accommodation?

"(b) That the University shall have the first use of such halls, corridors, galleries, as are necessary for carrying on its work of examination?

"(c) That all concerts and other entertainments in the Institute are to be abolished?

"(d) That a suitable entrance to the University portion of the building will be provided after due communication with the architect?

"(e) That all educational work of University character carried on within such portion of the building handed over to the Institute authorities shall be under the direct control of the University?

"(f) That proper accommodation will be provided for the University examinations in practical science either in the Imperial Institute buildings or in others to be built outside as may be decided on after further discussion?"

The reply, dated Christmas Day 1898, was as follows:—

"It is not the intention of the Government that any of the three parties should enter on the proposed inquiry with their hands tied. Their sole wish is that the University, the Institute, and the Treasury should meet and discuss whether *any*, and, if any, what arrangement is possible, under which the University could be suitably housed, and under suitable conditions, in the